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ABSTRACT OF DISCLOSURE

5 A partial stroke testing system for online testing of
emergency shut-off valve, said system is designed for
implementation on an emergency shut-off valve with a main
solenoid with manual reset, main solenoid valve, quick exhaust
valve and a pneumatic actuator connected to a source of
pressurized air supply for opening and closing the said emergency
shut-off valve and the said shut-off valve normally movable
10 between a fully open and fully closed position. The system also
include control means programmed into the plant emergency
shutdown system controller for initiating electrical signal for
initiating a test and for enhancing the bleed rate from the said
pneumatic actuator in the event of a emergency trip signal. Test
15 means for testing the said emergency shut-off valve without fully
closing the emergency shut-off valve in response to signal from the
said control means is included in the system. The said test means,
controlled by the said control means, include a second solenoid and
a second solenoid valve for bleeding off pressurized air to thereby
20 move the said emergency shut-off valve from full opened position
to partially closed position. Means for limiting the movement of
said emergency shut-off valve to a partially closed position because
of the bleeding of pressurized air is included in the system. The
system also includes an isolation valve for isolating the said test
25 means for maintenance purpose.